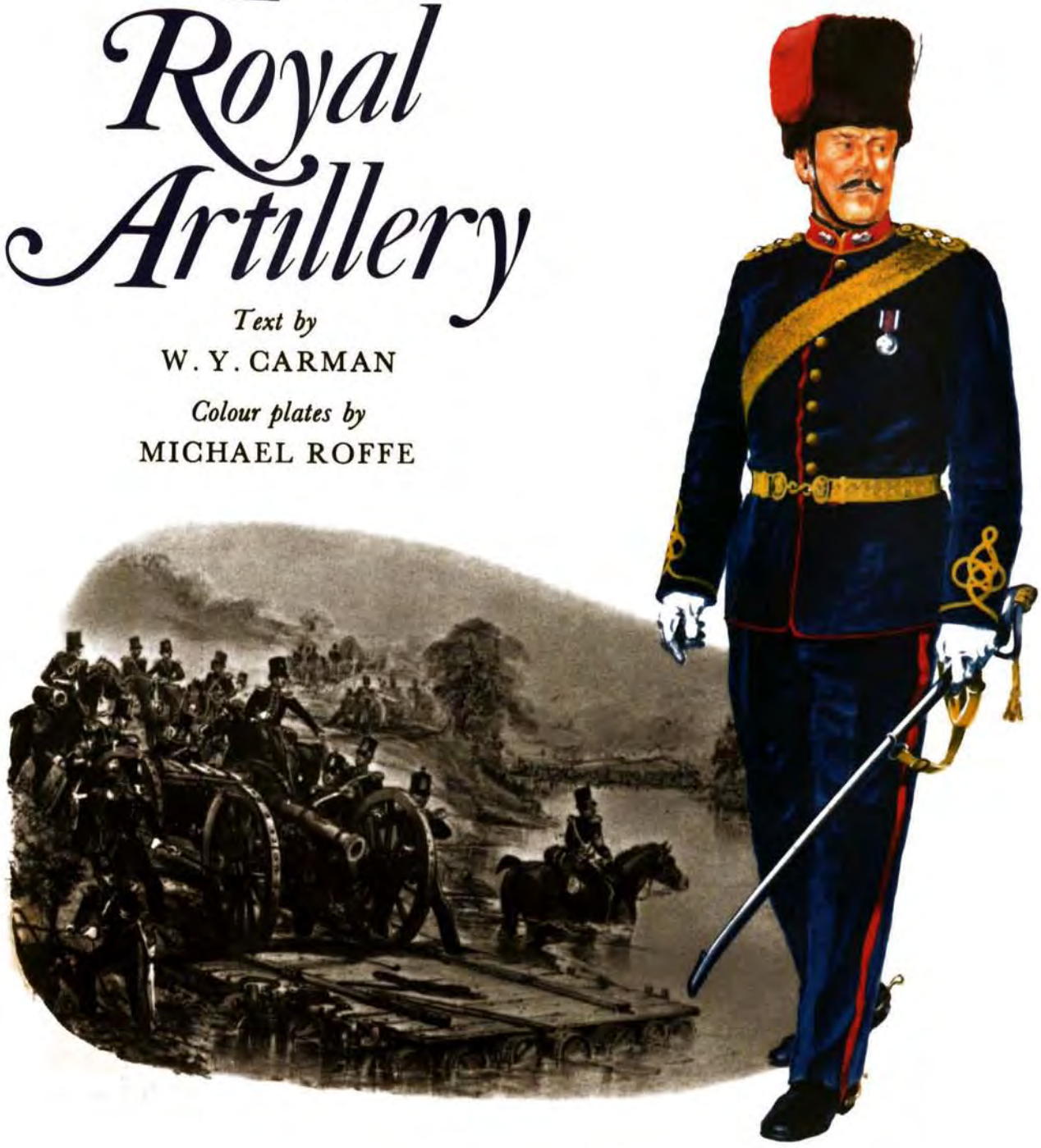
The Royal Artillery

Text by
W. Y. CARMAN

Colour plates by
MICHAEL ROFFE



MEN-AT-ARMS SERIES

EDITOR: PHILIP WARNER

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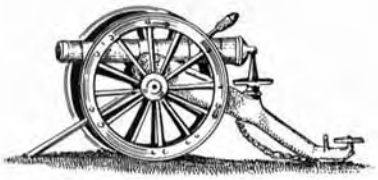


Early History

Since the earliest days of artillery, warlike material in England was stored at the Tower of London. Although the post of Master Gunner of the Ordance had been in existence for several centuries, a corps of artillerymen had not been established. It was not until the restoration of Charles II in 1660 that the army as we know it today was formed. The few men who remained loyal to the King in exile returned to become officers of His Majesty's forces. The Board of Ordnance now had such adherents as Sir William Compton acting as Master-General, Colonel William Legge as Lieutenant of the Ordnance and Colonel James Weymes as Master Gunner of England. Although cannon and ammunition were kept at the Tower, the actual trains of artillery which were to do the fighting and campaigning were only raised on special occasions when deemed necessary. Wagons and personnel were temporarily employed for these trains. Permanent trained gunners were but few. The Tower had fifty-two in 1661, but a few years later they were increased to 100 in number. In an emergency these 'fee'd' gunners would train the ordinary soldiers, and also serve the fortress guns in the strongholds around the coast. These men wore red coats guarded with black velvet, following the fashion of the Yeoman of the Guard and the Tower Warders. The Scottish artillerymen of 1682 also had scarlet coats 'laced with black velvet as the Yeoman of the Guard at London are'.

By 1671 the gun wharf and storehouse at Woolwich were being developed by the Ordnance. In May 1676 eight field pieces of artillery were present at the exercise of His Majesty's Horse and Foot Guards in Hyde Park. Gunners and pioneers were under their own officers.

When the Duke of Monmouth began his rebellion in 1685, King James ordered the Master-General of the Ordnance to prepare a train of artillery consisting of eight pieces: 4 iron three-pounders and 4 brass falcons. Another train with 2 twelve-pounders, 4 demi-culverins, 4 six-pounders, 4 sakers and 2 minions was raised a few days later. Apart from gunners, matrosses and pioneers, these trains needed specialists like smiths,

Gun team at practice with rocket overhead. After a lithograph of 1840

carpenters, wheelers, collar-makers and even a drummer.

The gunners each carried a field stave or linstock; the matrosses a half-pike; the sergeant of pioneers carried a partizan and the corporal a halberd. As well as a sword or hanger, the pioneers had either a pickaxe, shovel or spade. These pioneers wore red jackets and red caps; the artificers received higher pay and wore laced red clothing. But all these elaborate preparations proved ineffective at the Battle of Sedgemoor. Local oxen were pressed into service, and guns were dragged on to the battlefield with the assistance of the coach-horses and their traces which belonged to Peter Mews, the Bishop of Winchester. Even the gunners appear to have been insufficient in number, for Sergeant Weems of the Royal Regiment of Foot (later the Royal Scots) was later paid £40 for his good services at Sedgemoor in firing the great guns against the rebels.

In 1686 James raised another train of twenty-six pieces of ordnance to join the army on Hounslow Heath, where he kept his forces until 1688. He later formed the idea of infantry regiments each having 2 three-pounder field pieces which would be accompanied by the regimental grenadiers. Because of the danger of matchlock muskets setting gunpowder on fire, the grenadiers, armed with their flintlocks, were the most prudent choice of men to guard the cannon safely. In fact, the Royal Fusiliers under the command of Lord Dartmouth were originally raised as an ordnance regiment, and for a short period had a company of miners attached to them.

When, in October 1688, James heard that an invasion was imminent, he issued a warrant for a large train of artillery. This included 10 nine-pounders, 8 five-and-a-quarter-pounders, 4 four-pounders and 4 three-pounders, making 26 artillery pieces in all. The matrosses wore striped jackets, the pioneers red coats, and the conductors red cloaks, while the Chief Engineer, Sir Bernard de Gomme, had a suit of silk armour.

When William of Orange landed at Brixham, James ordered his army, together with the artillery train, to proceed towards Salisbury. Although there were minor skirmishes between the opposing forces, the artillery does not seem to have become engaged. The Prince of Orange had little difficulty in bringing his army into London, and upon his arrival there James, taking the better part of discretion, fled to France.

The Duke of Schomberg now became the new Master-General of the Ordnance. James II organized his forces and in March 1689 landed at Kinsale in Ireland. In the same month Schomberg prepared twenty brass pieces of artillery to fight the deposed monarch on his new battlefield. The gunners, matrosses and pioneers of this new artillery train wore blue coats lined with orange, the Netherlands colours. Many more cannon and mortars were gathered together in Chester and sent to Ireland in August 1689. In June 1690 William landed near Belfast to lead his army, and early in the next month the famous Battle of the Boyne was fought. Here the deep river valley reduced the role of artillery considerably, and it is said that the artillery horses were needed for the urgent task of bringing up supplies for the army. It is interesting to note, however, that the contemporary artist Wyck showed many large cannon in his painting of this battle, and they also appeared in the numerous prints which were published afterwards. Two small Irish guns made troublesome attacks, and one shot hit King William on the shoulder. Schomberg was killed during the battle.

A new train of artillery was prepared in 1690 which, according to Storey, a contemporary historian, was 'on a scale heretofore unknown in the British Isles'.

The year 1691 saw several English trains of artillery being prepared and leaving for the campaigns in the low Countries. By February 1692 two trains, one of seventy-six pieces and the other of forty-four, were being raised. A kettledrum carriage was now part of the train. Artillery trains did not have the usual musicians, and the idea was that two large kettledrums should be mounted on a specially made chariot and accompany the guns in the field. These drums could be played not only on the march but also when the train was in an encampment. Here an evening 'tattoo' might be played before 'lights out'. The kettledrummer wore the Royal Livery: in this case a state coat nearly completely covered in gold lace, as may still be seen today worn by members of the Household Cavalry bands on state occasions. The postil-

Kettledrummer's state coat, c. 1750. Back view showing vestiges of hanging sleeves. (National Army Museum)

lion also had a special uniform, as did the coachman, and there was a leather coat for rough weather.

The artillery train was present in Flanders at the battles of Steenkirk in July 1692 and Landen (or Neerwinden) in July 1693, but many guns were lost in the latter battle. Even Colonel Borgard admitted that sixty-three were lost. At the Siege of Huy in September 1694 the twelve cannon and mortars under Borgard received a commendation for their work in forcing the surrender of the enemy. When peace came with the Treaty of Ryswick in 1697 there were many trained men in the artillery, and these now formed the first permanent regiment in England. Before a year had passed the new regiment, which cost £4,482 10*s*. 0*d*. per annum, was broken up. The men of the four companies were disbanded, some going to the Tower of London and others elsewhere.

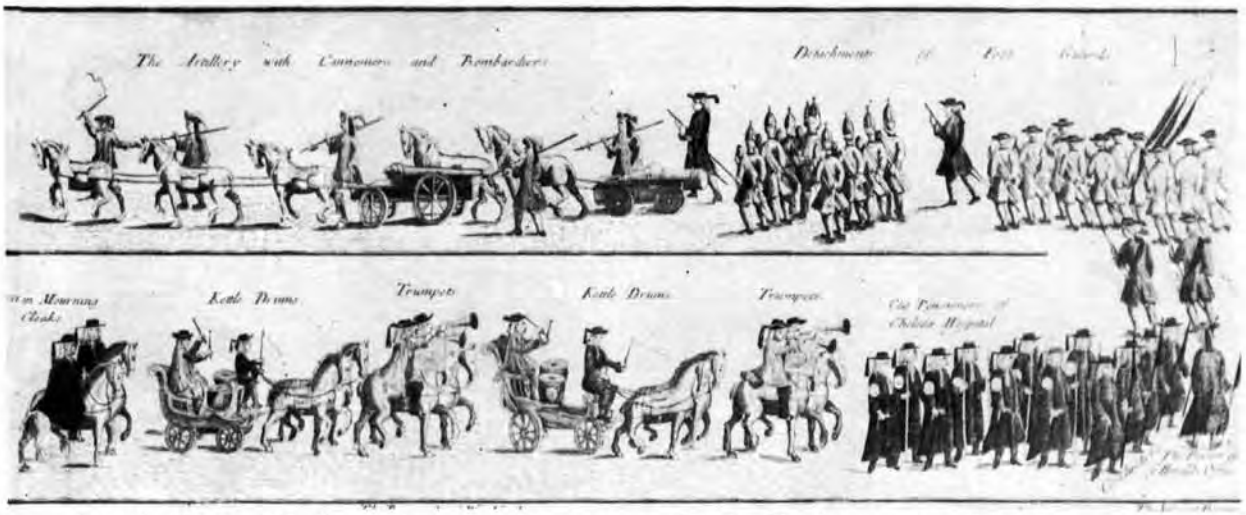
When Queen Anne came to the throne, war on France was again declared. In 1702 two new trains of artillery were raised and sent to Holland. The Duke of Marlborough was appointed Master-General of the Ordnance and reviewed the British army and artillery at Breda in August. Further trains increased the number in Holland to four. Other trains were raised soon after for service in Spain and Portugal.

At the Battle of the Schellenberg, near Donawert, ten cannon under Colonel Holcroft Blood were so effective in attacking the French infantry that the heights were captured and victory attained. Later, at Blenheim in August, the French and Bavarian troops expected to hold their position, but this was not to be, as the British artillery came so close to that of the French, that a heavy artillery duel took place at half-musket shot, or 700 yards. The Duke took a close interest in the positioning of the artillery and ordered Colonel Blood to cross the River Nebel in front of Blenheim. Here, Blood, with nine field pieces, kept the enemy infantry in check and with deadly accuracy ensured the success of the Allied troops. In this victory the British captured up to 100 cannon, which almost doubled those already under Marlborough's control. The capture of Marshal Tallard on this occasion was a great event.

Marlborough brought his artillery to the forefront of the battle lines at Ramillies in May 1706. Here the French lost the whole of their cannon, including twelve pieces of treble cannon. At Oudenarde in July 1708 only a battery was employed to cover the flank of the advancing troops. A few months later artillery battered the French troops besieged in Lille, which fortress eventually fell in October 1708.

In June 1709 the British army, including the artillery, marched to Ghent to join the Allied army near Menin. The citadel of Tournai was besieged by 104 cannon and other artillery and surrendered a few weeks later.

In September 1709 the Battle of Malplaquet took place, where the massing of forty cannon to support the attack on the right and centre of the enemy showed faith in the use of artillery. When the French troops were pushed back, Marlborough ordered this battery of guns forward. The artillery then spread outwards and decimated the French cavalry. The Siege of Mons began soon after and



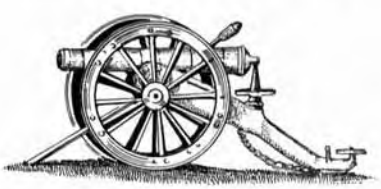
Funeral of the Duke of Marlborough in 1722, from a contemporary print. Top row: artillery with 'Cannoniers and Bombardiers'; bottom row: kettledrum carriages and trumpeters. (National Army Museum)

continued to the end of October, Colonel Blood being wounded at this place.

When the Allied army took to the field the following April there were 262 pieces of artillery, with 20 mortars and howitzers present. The siege of Douai occupied the efforts of 200 of these cannon, and when the town surrended in June the enemy handed over 200 iron cannon, 40 brass cannon and 8 mortars. July saw the end of this campaign, but the Peace of Utrecht was not signed until April 1713. Simultaneously artillery trains had been prepared and sent to Portugal and Spain. This artillery had been engaged at Almanza in April 1707, Port Mahon in Minorca in August 1708, the siege of Balaguer in 1709 and Sieges of Villa Nova and Almenara in July 1710, in Saragossa in August 1710, where the artillery lost eight men but captured most of the enemy's guns, and Villa Viciosa in December 1710. In this latter action, although the army of Charles – claimant to the Spanish throne – was defeated, Colonel Borgard was wounded and guns were lost.

Artillery was also sent to the New World, one destination in July 1710 being Port Royal on the coast of Nova Scotia. When the port was captured by the British from the French in 1710 it was renamed Annapolis in honour of Queen Anne. The artillery from England also accompanied an expedition against Quebec in May 1711, but this was not a success. In May 1713 some thirty cannon and thirty mortars and cohorns were established at Placentia in Newfoundland. It was through the Peace of Utrecht in 1713 that Acadia (Nova Scotia) and Newfoundland were formally ceded to the British. As the result of this long-drawn-out war Gibraltar and Port Mahon were now also established as British garrisons.

The rebellion in Scotland in 1715 saw a train of artillery being sent to the Firth of Forth, but the vessels which took the actual cannon by the sea route arrived too late for them to be used and they returned to London without being unshipped.



The Royal Regiment of Artillery 1714-83

Much had been happening in the making of history to prove continuous need of artillery on the battlefield. Perhaps it was when George I came to the throne of Great Britain with his close knowledge of continental armies that the advantages of forming a permanent artillery became obvious. The petty economy of temporarily raised trains was at last abandoned, and in May 1716

the bold step was taken to establish a permanent regiment of artillery, albeit if only of two companies. In 1717 the trains of artillery raised for Gibraltar and Port Mahon were organized into companies but did not become part of the Royal Regiment of Artillery until 1722. Now the regiment was entitled to a full colonel, and the first officer to be chosen for this post was Albert Borgard, the Dane who had been with the English artillery since 1692. He eventually rose to the rank of lieutenant-general.

In 1716 an inventory of the guns installed in the many garrisons and castles around the British Isles totalled 3,219. This number was to be reduced to 1,254 after the artillery requirements had been satisfied, the six guns doing duty in Whitehall disappearing for ever.

In June 1719 a detachment of artillery accompanied General Wightman when he marched to Inverness to attack the Spaniards at the Pass of Glenshiel. These invaders, who had landed in April, at Kintail in Ross and Cromarty were all taken prisoner. In July a train of artillery went to Vigo in Spain and after bombardment the castle surrendered in October. Many guns and much in the way of stores were captured. The expedition returned to England in November 1719.

John, Duke of Marlborough, died in 1722, and his death was the occasion of a fine state funeral. This benefactor of artillery was accompanied on his last journey by a train of fifteen pieces of cannon and two mortars. The kettledrum carriage with its great drums and two companies of cannoniers and bombardiers were drawn up in Hyde Park before making the march to Westminster Abbey and St James's. Contemporary prints record this occasion with interesting detail.

In 1723 a camp was established in Hyde Park and the artillery train was present with twenty pieces of ordnance under a guard of twenty-five infantrymen.

Trouble with Spain broke out again in 1727 when 20,000 Spaniards with fifty-four cannon besieged Gibraltar. The original artillery company was re-formed by Lieutenant-Colonel Jonas Watson with 520 men from Woolwich. The siege, which lasted four months, was broken by the extra guns and stores which later arrived from England and Mahon, and by a firm and successful defensive action by the newly formed Regiment of Artillery. An artillery captain-lieutenant was killed in one of the batteries, but the total losses were comparatively light.

The men of the Royal Artillery also served at sea. In 1729 two bomb-vessels went to the Mediterranean with fireworkers, eight bombardiers and two gunners. The next month two more bomb-vessels were fitted out for service in the Baltic Sea. In 1738 another three bomb-vessels were prepared and Captain Thomas James was in charge of six lieutenants and thirty-six men. Each vessel carried a 13-inch mortar and a 10-inch howitzer with 400 shells, as well as 40 carcasses for each mortar and howitzer. In 1739 the Royal Artillery fitted out three more bomb-vessels, one for the Mediterranean and the others for the West Indies. This sea service for what is normally a land force continued into the next century.

In 1740 a fifth permanent company was raised, and together with other companies under Colonel Watson took part in the preparations for the expedition assembling that year at Portsmouth under Charles, Lord Cathcart. But in December the General died on the island of Dominica, and so Brigadier-General Wentworth took command of the military force. Arriving at the South American port of Cartagena in March 1741, the landing forces included a battery of twenty twenty-four pounders. These guns went into action with a terrific cannonade, and eventually the castle of Bona Chica was carried by storm with the combined efforts of infantry and artillery. Colonel Watson was killed, as were many others, as a result of the spirited resistance made by the Spaniards. Other forts near by were attacked but without success. A withdrawal had to be made and the fortifications captured earlier had to be demolished. This disastrous campaign saw the death of some 20,000 men, many from illness. On the death of Colonel Watson, Major Lewis appointed himself lieutenant-colonel and promoted Captain-Lieutenant Belford to major, promotions which were later confirmed in England by the King.

In the War of the Austrian Succession British troops had their first major engagement at the Battle of Dettingen in 1743. It was on this occasion

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1 **Sword-belt plate, 4th Battalion Royal Artillery, c. 1780**
2 **Gilt belt plate, Sandwich Volunteer Artillery, c. 1806**
3 **Gunner's belt plate with thunderbolt below the Garter, c. 1824**
4 **Officer's gilt belt plate, c. 1833–7**
5 **Shoulder-belt plate, Bombay Foot Artillery, c. 1835**
6 **Shoulder-belt plate, Bengal Foot Artillery, c. 1845**

that King George II achieved fame as the last British monarch to fight on a battlefield. When his large white horse ran away the monarch fought on foot saying that at least his own legs were not capable of running away with him. Twenty-four three-pounder British guns were present in the battle to support their Austrian allies in the victory over the French troops.

The Battle of Fontenoy in 1745 was not a British victory. When the Brigade of Foot Guards advanced in the late afternoon seven British cannon used grape-shot to good effect. There were also two three-pounder guns attached to each infantry battalion which the artillerymen manhandled to within thirty yards of the French infantry. In all, the British guns numbered 47 whereas the French had 266 pieces, a fact which may have influenced the civilian drivers hired by the British to run away so fast that they reached Brussels the same day, as harbingers of disaster.

When the Pretender, Prince Charles Edward, came to Scotland to assemble an army for the ''45 Rebellion', two companies with a train of artillery under Colonel Lewis were ordered to march north from Woolwich. But information that the Scottish forces had retreated from Derby

was received soon after, and the artillerymen returned to their base without seeing any action. Four companies in Flanders were ordered home, but it was seamen who handled the guns at the Battle of Prestonpans. Six eighteen-pounders did attack the walled city of Carlisle in December 1745 and forced it to surrender.

At the Battle of Culloden the following year Colonel Belford eventually replied to the cannon of the Highlanders by using his ten guns to plough lanes through the ranks of closely packed Scotsmen. He also directed two guns to fire so close to the Prince that he was bespattered by dirt cast about by the cannon-balls. A man holding a horse by the Prince's side was killed. After half an hour's cannonade Prince Charles gave the order to charge. The reply of grape-shot from the cannons did not allow the Scots force to approach closer than 100 yards. The artillery casualties in this action were 6 men.

The Treaty of Aix-la-Chapelle brought an end to the War of the Austrian Succession in 1748. But it did not bring a long peace to Great Britain, for the Seven Years War broke out in 1756. During the peaceful period the Duke of Cumberland reviewed the artillery annually at Woolwich. New companies were formed at this time and they went to the East Indies, a term which then covered the subcontinent of India and the surrounding countries. Also in May 1755 a detachment of a lieutenant and twenty-four men was sent from Woolwich to Ireland where they became the nucleus of the Royal Irish Artillery. It was in April 1756 that the Duke of Cumberland ordered that the artillery was 'to take the right of all foot on parades and likewise of dragoons when dismounted'.

During the Seven Years War the Royal Regiment of Artillery distinguished itself at the Battle of Minden in 1759. When British and German armies advanced against the French, each flank was protected by the fire of thirty cannon. Captain Macbean's brigade of light twelve-pounders completely silenced the guns on the French left flank. Then his heavy sixteen-pounders moved up and at short range forced the retiring enemy to surrender forty-three guns and all baggage. Duke Ferdinand of Brunswick wrote the next day paying Macbean tribute for his fine work. The descendants of two of the batteries present at this battle were later granted the honour title of 'Minden'.

At the Battle of Warburg in July 1760 Captain Phillips brought up his guns at the gallop, an unprecedented occurrence at that time. His subsequent cannonade forced the French to retire in disorder over the River Dymel. Two new companies came out that year and served at Wilhelmsthal. Peace was signed in November and early in 1763 the artillery marched through Holland and returned to England.

Across the Atlantic the Royal Artillery were also fighting the French, for the French army was in a strongly fortified position in Louisbourg. In 1758 an artillery train under Colonel Williamson supported the troops under General Wolfe and brought down much of the walls of the Louisbourg fortifications. The successful action is noted today in the honour title of 'Louisbourg' which is granted to the modern successor of Captain T. Ord's company. The Battle of Quebec soon followed in September 1759. There were only fifty artillerymen present, and two guns of Captain Macleod's company were employed. It is said that the navy did valiant work in helping to haul the guns up the Heights of Abraham, and Captain-Lieutenant Yorke received commendation for his use of the light artillery. This valuable support contributed to the decisive battle by which Wolfe won Canada for the British Empire. The descendant of this company bears the honour title of 'Quebec 1759'.

AMERICAN WAR OF INDEPENDENCE

In April 1775 the first shots were fired in the American Revolution, and immediately Lieutenant-Colonel James of the Royal Artillery mounted a battery of six twenty-four-pounder guns on Cope's Hill which commanded the river and peninsula of Charlestown. As these guns had come from naval battleships the new defence was called 'the Admiral's Battery'. In June, when warfare became inevitable, the Royal Artillery armed the battery with some of its own guns and it was then renamed 'Cope's Hill Battery'. The Americans marched across the isthmus which

connected Charlestown with the mainland and the artillery plied them with gunfire. This did not stop the rebels from advancing and inflicting much damage on the British troops. The artillery was then ordered to fire carcasses, a kind of bomb, into the town. These set many buildings on fire including the steeple of the church. The dangers of the ensuing blaze forced the American infantry to retire leaving five guns behind them.

Although the war in America was one very much decided by infantry, artillery continued to be employed throughout the long-drawn-out conflict.

SIEGE OF GIBRALTAR

While the British forces were engaged with the Americans' War of Independence, the Spanish and the French attacked British possessions in Europe. General Elliot, the Governor of Gibraltar, expected trouble and in 1777, although he had five companies of artillery, asked that the garrison might be doubled in number, 'especially artillerymen'. After two years had elapsed one extra company was sent out. The siege which began in 1779 and lasted until 1783 was very much a gunners' affair. In January 1780 the British fleet brought a captured convoy into Gibraltar and this was the signal for the Spanish batteries to open fire. These had been set up on the land side to the north. Return fire from the gunners on the Rock had an accurate or lucky hit on the St Carlos Battery, which blew up the powder magazine and silenced the enemy for several days.

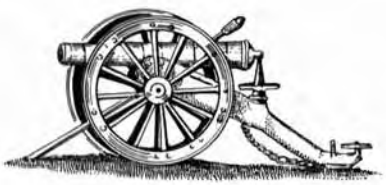
The Spanish nation instituted a blockade intended to starve out the garrison of Gibraltar and this lasted until April 1781. As shipping was able to supply the garrison the Spaniards realized that starvation was not the answer and they then began an intensive bombardment which continued for a year and a half. Some 200 cannon on the land side and another 200 from battering ships led to over 200,000 shots, shells, etc. being fired at the British troops. To ease this pressure a land sortie was planned, and in November 1781 a successful surprise attack was made: 114 artillerymen accompanied this sortie and they were able to spike eighteen twenty-six-pounders and ten 10-inch mortars of the enemy.

The problem of firing down from the heights of the Rock which faced the British was partly solved when Lieutenant Koehler constructed a gun-carriage which enabled the gun-barrel to be depressed below the horizontal. This had the piece resting on a wooden bed which hinged in front of the trunnions. Thus the rear end could be elevated while the muzzle remained more or less in the same place and faced gradually downwards. The idea was successful and twenty-eight out of thirty rounds entered the St Carlos Battery although it was over 1,400 yards away. Years later when Koehler was invited to enter the service of the Flemings and fight the Austrians, General Elliot gave him permission to do so and he rose to the rank of major-general.

The floating batteries of the Spaniards was the next problem to be tackled in breaking the siege, and in September 1782 red-hot shot was used

Artillerymen, from a print by J. A. Atkinson, 1807. (Parker Gallery)

against the enemy for the first time and exceeded all expectations. The cannon balls were heated to a red heat in small iron furnaces and when fired in the normal fashion they were able gradually to burn their way through wood and even dampened leather. The enormous floating batteries of the enemy were armed with 212 new brass guns and had special shelters over the top. It was on these shelters that water and wet leather were placed in the hope that this would stave off the dangers of the red-hot shot, However, the intense bombardment which the British gave ensured that in time the heat took effect, and one by one the floating batteries caught fire and blew up with terrific explosions. With these out of the way, the siege was practically over and peace was signed in February 1783. The breadth of the artillery measures in this siege is to be noted in the fact that five batteries descended from those defenders bear the honour title of 'Gibraltar 1779–83'.



The Napoleonic Wars

When Revolutionary France invaded the Netherlands in 1793 Britain could not stand by, and entered the conflict. The Duke of York took an army to Flanders in which the artillery was under the command of Major (later Sir William) Congreve. The guns were actually attached directly to the infantry battalions and not organized as an artillery brigade, but at the siege of Valenciennes it was realized that guns were needed to fire in battery and they were thus detached from the infantry. After two months' bombardment the garrison surrendered. Although the campaign had some success for the British troops, an engagement with the French army in May brought defeat and the expedition returned home early in 1794.

In 1799 another large expedition consisting of companies of artillery and a troop of horse artillery went to the Helder in North Holland where it met a Russian force and both combined under the command of the Duke of York. This was the first occasion that the new body of horse artillery formed in 1793 went into action. Artillery guns had some success against the French dragoons, but no useful conclusion came to the expedition. The Royal Artillery was now organized into brigades and no longer attached to infantry battalions.

The French had been established in Egypt since 1799 and so a British expedition set sail in the Mediterranean. Under strong fire the troops landed at Aboukir in 1801, the artillery getting its field pieces ashore at the same time as the infantry. The heavy artillery then bombarded the castle of Aboukir which surrendered a few days later. There were thirty-four pieces available for use at the subsequent Battle of Alexandria, but being without means of draught these were not used. Had horses been available it is possible that the fate of Alexandria would have been decided that day.

By August two batteries had been established, but not before some strenuous manhandling of the guns over most difficult rocks and countryside. The only horses which could have been available were the offcasts of the weakened cavalry. Once the guns were in position the bombardment was successful and Alexandria had to surrender. Elsewhere in Egypt the British forces defeated the French and remained there until the Peace of Amiens in March 1802. All those participants in this campaign were thereafter personally allowed to wear a special badge commemorating Egypt, the first time that such a distinction had been granted to all ranks in the British forces. The badge of a sphinx was worn on the soldier's headdress, and retained even if he should join another unit. Officers of artillery carried the sphinx on the sabretache while other officers in the battalion or troop did not. The honour title of 'Sphinx' is borne by five batteries in modern times.

When the French troops were driven out of the West Indies, many small though important actions took place. That in Martinique in 1809 has special interest. Fort Royal had fallen but Fort Desaix was a strongpoint defended by 120 artillery pieces. Gunners and sailors worked day and night for ten days in pouring rain to establish five batteries. A continuous bombardment achieved its aim when

the main enemy magazine was blown up by a mortar shell on 24 February. For its stout work in the attack Captain Stewart's company was allowed a choice of trophies. It is said that as the men knew they were soon due for transfer to a new station a beautiful brass one-pounder French gun had to be refused, and in its place a French pioneer's axe and a brass drum were chosen. The drum has disappeared, but the axe with the badge of an eagle attached is carried by the tallest gunner when 'Battle Axe' day is celebrated in the battery on 24 February each year. The battery is sometimes called the 'Battle Axe' Company. As this company is descended from one of the companies of the old Royal Irish Artillery, one wonders whether its members had remembered that the old galloglasses of ancient Ireland survived as the Battle Axe Guards in the late seventeenth century and took this evocative title.

THE PENINSULAR WAR

When Napoleon put his brother on the throne of Spain the Spaniards took up arms against him. A British army complete with artillery went to the Peninsula in 1808 to free Portugal and Spain. At first the two artillery companies under the command of Colonel Robe were sent to Portugal. In August General Wellesley, later the Duke of Wellington, attacked Rolica and there a battery used shrapnel for the first time in action and to good effect. Captain Shrapnel of the Royal Artillery later received a pension of £1,200 per annum for this invention. Later, at Vimiero, the discharge of spherical case from the nine-pounder batteries drew off the menacing French cavalry. In an evening battle when the French infantry nearly overwhelmed the British, a delayed and well-timed volley at sixty yards broke the attacking column and the 50th Foot chased the retreating enemy for nearly three hundred yards.

Sir John Moore and a new army brought 712 fresh artillerymen from England, but several died during the difficult landing. The French under Napoleon forced their retreat, and in January 1809 the Emperor felt confident enough to hand over to Marshal Soult. Moore decided to use Corunna as his base for withdrawal. The artillery beat off the French attack and successfully covered the retreat.

The following year Wellesley returned to Portugal to force the French out of that country. Within a few days the French were driven out of Oporto. At the Battle of Talavera in July 1809 neither horses nor mules could be found to draw the field guns. However the best was done and British, Spanish and Portuguese batteries fought together in this battle. The approach of a French army in his rear caused Wellington to retire, but one of the three British batteries earned the honour title of 'Talavera'.

Having occupied most of Spain, in late 1809 and the following spring the French army made ready to drive the British out of Portugal. At Busaco in September a stand was made. The horse artillery rendered great service, and after the artillery caused heavy losses the French withdrew. Lord Wellington now returned to his strongly fortified lines at Torres Vedras.

At Albuhera in May 1811 the British artillery and that of the King's German Legion were hotly engaged, the latter being somewhat cut up during a ferocious charge by the famous Polish Lancers.

A siege-train was formed to take Ciudad Rodrigo, which fell in January 1812 after 200 rounds per gun had been fired. Badajoz was the next to fall to the bombardment of the siege-train. Wellington was now able to undertake operations in the field in which Portuguese artillery accompanied the British. At Salamanca a breach was not initially effected as supplies of ammunition had become exhausted, but in July the battle was successfully engaged. The winter of 1812–13 was spent in reorganizing, and reinforcements were found for the artillery.

In April 1813 four mountain guns under Captain Arabin engaged the enemy at Bier. By June, Joseph Buonaparte had his soldiers in front of Vitoria, and his artillery checked the advance of the 3rd, 4th and 7th Divisions. The British artillery joined the conflict, and after half an hour so weakened the enemy that a general advance was made possible in which the heights were carried and twenty-eight pieces of artillery captured. The final victory saw 150 cannon abandoned on the field of battle. Wellington's report to the Prince Regent was sufficient to bring a special cash award to all the officers commanding artillery.

The French army was now hard pressed. At

Left to right: Lieutenant-Colonel S. G. Adye, c. 1816, in gold-laced coat; Major Henry Baynes, c. 1826. He was Brigade-Major of the Royal Artillery at Waterloo; Lieutenant G. T. Boger, c. 1828, after a miniature

San Sebastian a three-month siege with fifty-nine pieces of heavy ordnance softening the fortress led to victory by an assault. The storming parties were astonished to hear artillery firing in their rear, for this was the first occasion that infantry was supported by artillery bombardment over their heads. By five o'clock in the evening of 31 August 1813 San Sebastian was in the hands of the British.

In pursuing the French troops across the Pyrenees, the use of mountain artillery was effected by Lieutenant Robe who instigated the carrying of three-pounder guns on mules. In November the Battle of Nivelle was fought and the Allies entered France. The artillery continued in the advance across France and was present at the crossing of the River Adour, and at the sieges of Bayonne, St Étienne, Aire and Toulouse. By 1814 Napoleon realized his impossible position and abdicated.

The Peninsula was not the only battlefield of this period. After extensive preparations the Americans declared war on Great Britain in 1812. The British achieved a victory at the Battle of Queenstown, but at the cost of the life of the commander of the British forces, General Brock. At Fort Erie in November the militia artillery was surprised and routed; gunboats were engaged in minor actions; artillery under Captain Jackson took part in the action at Chrysler's Farm, and later on their retreat Fort Niagara was captured. For their action in Canada some artillerymen were allowed to wear the word 'Niagara' on their appointments, and later a battery was given this as an honour title.

As the European conflict seemed over, in 1814 fresh troops were sent to America. An attack on the American capital was planned. In August the Battle of Bladensburg saw British rockets successfully in action, and soon after this government buildings in Washington, including the Capitol, the Arsenal and the Dockyard, were set on fire; 194 cannon were captured on this occasion. At Baltimore in September, where General Ross, commander of the British forces, was killed, the British artillery did great execution and created a panic which brought about the defeat of the American forces. But in the new year at the Battle of New Orleans it was the British who suffered defeat, this unfortunate battle taking place a week after peace had been concluded.

Royal Artillerymen with a rocket in Burma, 1824. From a contemporary print

WATERLOO

Napoleon could not rest in exile in Elba and in February 1815 returned to France to collect an army of 116,000 men. Artillerymen from Britain and America went to the Netherlands to build up the Allied armies which were assembling to counter the French threat. Sir George Adam Wood was made commander of the artillery on the Continent. In the battle ranks were six troops of Royal Horse Artillery with the cavalry, and two in reserve, while eight companies or batteries of Royal Artillery as well as others in reserve were ready for general use. Most batteries were formed into brigades of five nine-pounders and one 5½-inch howitzer.

At Quatre Bras the day before Waterloo only two field batteries were engaged, with losses of nine men killed and one of the majors slightly wounded. At Waterloo Wellington had the artillery on the crest of rising ground with the infantry just below it, and the cavalry to the left and behind the centre. When the French cavalry attacked, the guns fired to the last moment and then retired into the infantry squares, none of which were broken. When some guns of the King's German Legion were overrun by cavalry the gunners defended themselves with their heavy brass-hilted swords. At the end of the day when the Old Guard made three attacks on Wellington's front the cannon dual was terrific. The Allied artillery kept up its fire on the Guard, but when they ignored it and reached the top of the crest Wellington gave the order for the British to advance and the day was won. Although Napoleon was defeated, the Royal Artillery had to reduce the minor fortresses still resisting on the frontiers until all had surrendered.

Waterloo was regarded as a special distinction for all those serving in this battle, and for the first time every man was given a medal. 'Waterloo' was an honour to be worn on artillery distinctions, but in 1833 it was decided that as artillery had served in so many theatres of war there was little purpose in awarding separate honours. The Royal Regiment of Artillery was now awarded *Ubique* meaning 'Everywhere' and *Quo Fas et Gloria Ducunt*, 'Where right and glory lead'. The grant of the Royal Arms above a gun accompanied this award.

In 1826 it was decided to send troops to Portugal because of the attitude of Spain against this ancient ally. A four-gun brigade went and it is fortunate that it was not in action, for the material was of poor quality and would not have stood up to battle conditions.

At the time of the Rebellion in Canada in 1837 two guns were used against the French-Canadians, while in 1840 a small force went to Syria. Others went to China and Kaffraria but no major conflict arose until the Crimean War.

THE CRIMEA

Because of Russia's overbearing attitude to her weak neighbour Turkey, Great Britain entered into an alliance with France, Turkey and Sardinia to curb the Russian bear. The invasion of the Crimean peninsula through the port of Sevastopol led to two years of dreary fighting. A siege-train

Company officers. After a print by W. Heath, 1828

Epaulettes.
Left: lieutenant, Royal Artillery, 1838; right: captain, Bengal Foot Artillery, 1837

and eight field batteries were part of the original invading force which comprised five divisions. The Battle of the Alma soon took place on 24 September 1854. The Russians were waiting on the heights; the French began by turning the enemy's left flank and the British artillery was throwing shot into the Russian redoubts. At one time Lord Raglan pushed forward through a gap in the Russian lines made by the withdrawal of the Moscow regiment. He then found himself looking down on the Causeway Battery and the Russian reserves. Eventually the Gordon Highlanders came up the hill and when at last two guns arrived the situation was relieved and the General safe.

Heavy siege-guns continually attacked Russian fortified places, including the Redan. Finally when the Malakoff fell the Russians evacuated the fortress overnight. The troops withdrew across the harbour and British artillery fire sank the ships. Blowing up the forts was the last deed in a campaign which may seem to have achieved little.

THE INDIAN MUTINY

For many years India had maintained its own artillery. In fact each of the three Presidencies had their own horse and field branches, with a common origin from the British gunners who went to India in 1748. The story of the Indian artilleries is long and complex for they fought in major and minor battles that took part all over Asia and even Africa. Egypt, Java, Burma, Kabul and China are but a few of their battle honours won before the Mutiny. In this rebellion, which broke out in 1857, many artillery officers were awarded the Victoria Cross. The Madras and most of the Bombay Army remained true as did the white regiments of Bengal. At Cawnpore in the first week of the Mutiny thirty-nine men of the Bengal Artillery were killed and wounded, while firing their guns to the last round. The assault and capture of Delhi saw the Bengal Artillery leading the bombardment, and Lieutenant Remy

gained the Victoria Cross for throwing fused shells from the arsenal wall on to the enemy below, while a siege-train breached its way into Jhansi. Lieutenant Roberts of the Bengal Artillery, better known later as Field-Marshal Earl Roberts, won his Victoria Cross in hand-to-hand fighting to save a cavalryman.

When the Mutiny was over the Presidential forces were disbanded and the white artillerymen came directly under the British Crown and were numbered accordingly. Three mountain batteries from India took part in the Abyssinian Expedition of 1868. The mountain passes of Ethiopia saw elephants pulling guns on this odd but successful venture.

AFGHAN WAR

Fighting continued on the frontiers of India, including that of the Second Afghan War of 1878–80 where elephant transport was used on both sides. The guns of horse artillery were carried on elephants and on other occasions the heavy forty-pounder guns were drawn by elephants.

In June 1880 in Afghanistan a local rising threatened the British at Kandahar and so two batteries, one improvised from captured smooth-bore cannon, advanced to Maiwand. An enemy force seven times that of the British was on its way to Kandahar, and attacked. The overwhelmed artillery limbered up the guns in the presence of the Afghans and only two were left behind. Two Victoria Crosses were gained in this action and the battery was given the honour title of 'Maiwand'.

At the same period Britain was fighting the Zulus in Africa, not too successfully, at Isandhlwana. Later at Ulundi, when victory was gained, the artillery had a variegated arsenal which included gatlings, seven-pounders, nine-pounders as well as rockets.

Mountain artillery carried by mules. By G. B. Campion, drawing master at Woolwich

Front view of officer's coatee with gold embroidery as introduced in 1838
Back view of officer's coatee as worn up to the Crimean War

THE SUDAN AND SOUTH AFRICA

After the massacre of Europeans in Alexandria a full-scale war was undertaken in Egypt in 1882. Sir Garnet Wolseley intended attacking Arabi Pasha's army at Tell-el-Kebîr. Seven field batteries were in the centre of the approach with the infantry on the flanks. In the dawn action the leading gun of 'N' Battery was put out of action by the breaking of a wheel. The other five sixteen-pounders so devastated the Egyptians that the latter had to retreat. The battery advanced in front of the infantry and taking a new position drove the enemy out of their trenches and redoubt. The fleeing Egyptians took to three trains, but the guns quickly put one out of action. The battery was granted the honour title of 'The Broken Wheel Battery', which is still preserved today.

In 1884 Wolseley led an expedition to rescue General Gordon in Khartoum. When crossing the desert with camel transport for its 2½-inch guns, 'I' Battery came across the Mahdi and his troops who were holding the wells at Abu Klea. As the infantry square advanced, the guns went forward by hand to fire on the Arabs. A mounted charge against the square was diverted by a single salvo of case-shot. In the following mêlée hand-to-hand fighting took place, but the square was finally reformed. As a result of this action a Victoria Cross was awarded, while the title of 'Abu Klea' was

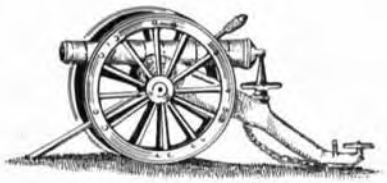
given to the battery. Gordon, however, had perished and it was not until 1898 that the victory of Omdurman finished the power of the Dervish forces. General Kitchener at this time had not only two British field batteries but also Egyptian horse and field batteries under Royal Artillery officers.

Although there had been a previous war with the Boers, a major conflict broke out in October 1899 over the treatment of British subjects in the Transvaal. The scattered British forces gathered into garrisons like Ladysmith and Kimberley where they were besieged. When General Buller's relieving force came to cross the River Tugela at Colenso the entrenched Boers held off the advance with deadly fire. The 14th and 66th Batteries rode up to the river and unlimbered within 500 yards of the Boer trenches. But one by one the guns were put out of action as the gunners were picked off. The men had to be ordered back to shelter. Then strenuous efforts were made to retrieve the guns, and after much effort two were saved. For this action Victoria Crosses were awarded to two captains and a corporal of the Royal Field Artillery.

The Royal Horse Artillery made its mark at Sanna's Post when 'Q' Battery was awarded four Victoria Crosses. There are many other occasions full of valour and distinction. It was at Itala in September 1901 that a driver of 69th Battery received the Victoria Cross for bringing up ammunition under heavy fire, and at Tafelkop in December that a certain Shoeing-Smith was granted the Victoria Cross when limbers were galloped away to prevent the Boers from manning the guns.

During the Boxer Rebellion in China in 1900, British artillery with men of the Hong Kong/Singapore Artillery served in the international field force. In the little-known expedition to Tibet in 1904, when Lhasa was occupied, men from two mountain batteries were present.

Left: 10-inch howitzer and (right) eighteen-pounder siege gun advancing. By G. B. Campion



Royal Artillery in two World Wars

WORLD WAR I

The outbreak of war in 1914 saw the British Expeditionary Force facing the might of the German army. With so many hundreds of artillery units in action during this lengthy war it is difficult to give a general coverage. Thus a few of the outstanding events may be noted.

The five divisions of the Expeditionary Force were facing overwhelming numbers in Belgium at Mons and Le Cateau. When forced to withdraw, 119th Battery was part of a flank guard and took up a position near the village of Elouges. Two guns were checking the German cavalry, but when the enemy came within 200 yards of the guns the order to withdraw was issued. Then with the aid of the 9th Lancers all the guns were successfully brought back, the delaying action of this tremendous effort preventing the Germans from enveloping the flank of II Corps. The major in charge of the battery was awarded the Victoria Cross. There is little doubt that the honour title of 'Elouges' would have been awarded to the battery, but it was disbanded in 1922.

In the same withdrawal 37th Battery Royal Field Artillery (Howitzer) had engaged in counter-battery work, while the eighteen-pounder guns covered the movements of the infantry. 37th Battery was ordered to dig in and hold the position

Thirteen-inch mortars in action. By G. B. Campion, 1846

Top left: shoulder scale for undress jacket, Bengal Horse Artillery, c. 1845; top right: shoulder scale for frock coat, Bombay Foot Artillery, c. 1840; centre: shoulder cords, major on reserve, Royal Artillery, c. 1886; lower left: shoulder scale for frock coat, Durham Artillery (Militia), c. 1854; lower right: shoulder scale, probably from tunic, Militia Artillery, c. 1856

at all costs. Other batteries successfully withdrew their guns, although two howitzers of '37' looked like falling into the enemy's hands before two teams of horses with volunteer drivers successfully limbered up both of them. Although German infantry was surrounding the place, one team dashed out at the gallop. The second was shot down by German rifle fire. The captain and two drivers of the more fortunate team received Victoria Crosses. The battery, later numbered 93, received the honour title of 'Le Cateau' in 1914.

In September 1914 'L' Battery attached to 1st Cavalry Brigade was surprised by German cavalry. The guns went into action immediately, but one by one they were silenced. However, despite continued enemy efforts the last gun continued to resist. It was the timely arrival and determined efforts of 'I' Battery that forced the Germans to retreat leaving eight guns on the field. Three Victoria Crosses were awarded to men of 'L' Battery, and the honour title of 'Nery', the place of the action, was granted to the battery.

Sixty-eight pounder gun in casement of a fortress. By G. B. Campion, 1846

A bombardier of 113th Battery was awarded a Victoria Cross for his outstanding gallantry in September near Vendresse when he persisted in laying his gun – pointing and adjusting prior to firing – although twice wounded. The Battle of the Somme in 1916 and of Passchendaele in 1917 saw much bravery in artillery units. At Messines in April 1918 'A' battery of 88th Brigade fired over open sights. The Battery Commander then rallied the infantry and by his efforts delayed the Germans' entry into Messines for over twelve hours. Unfortunately he was later killed and received his Victoria Cross posthumously.

The Royal Artillery fought not only in Europe but in the Middle East, Egypt, East and West Africa and even Russia.

WORLD WAR II

Between the two world wars little battle experience was to be gained by the British army, although the Italians tried their strength in Abyssinia and North Africa while the Germans joined in the Spanish Civil War. Although fighting took place in the north of India and in the Middle East, as well as a skirmish further east, the artillery was not in special demand. However, great changes in the army were taking place, the horse had become obsolete and the year of 1938 was the time of the increasing and replanning of the artillery. Despite these preparations the outbreak of the Second World War did not seem to find the British army better prepared than on any other occasion. The new British Expeditionary Force went to join the French army to defend the Maginot Line and the Belgian frontier against their old enemy. When the Nazis decided to end the 'phoney war' and begin their blitzkrieg there was little the British army could do but follow the retreating armies and evacuate, which they did by the miracle of Dunkirk. It was in May 1940 that 'K' Battery, Royal Horse Artillery defended the village of Hondeghem by firing point-blank at the enemy. The guns were manhandled up and down the village street until most were knocked out of action. Down to one gun and darkness having fallen, the Commander escaped under Nazi fire. The battery was given the honour title of 'Hondeghem'.

The centre of land conflict changed to North Africa with the Italians occupying the coast of North Africa and the Allies in Egypt. Much time and effort were spent in advancing and retiring along the coast road. In June 1940 Graziani had led his troops towards Egypt. The British counter-attacked, taking Tobruk in February 1941, the two divisions destroying an Italian army five times its size. The arrival of Rommel and the Afrika Korps soon pushed the Allies back to the Egyptian border. The Australians in Tobruk had been by-passed by the Germans and the British made a determined effort to relieve them. When British tanks were suffering severe losses in both this area and at Sidi-Rezegh, four anti-tank guns of 'J' Battery engaged sixty enemy tanks and prevented the position from being overrun. The lieutenant in command was posthumously awarded the Victoria Cross and the battery named the 'Sidi-Rezegh Battery'.

Rommel drove the British army back to their prepared stand at Alamein. He was sure that he would enter Egypt with the minimum of delay, but the build-up of British forces was too much. At the northern end there was one gun to every twenty-three yards on a front six miles wide. When the barrage for the Allied breakthrough began on 23 October 1942 it was the heaviest ever put down in the desert. The push forward took 30,000 prisoners including nine generals.

Rommel successfully withdrew his troops back to the Mareth Line in Tunis. In November the

First Army landed in French Africa and pressed on to the north of Tunis. Rommel had built up his troops and held the Allies at bay. In the north, Beja was to be the key to the Allied northern line. The Germans made great efforts to prevent this. Thus 155 Field Battery at Sidi Nsir came up against infantry groups and tanks of the 10th Panzer Division. Eight Messerschmitts swooped down to finish off any remaining pockets of resistance, for fire and destruction seemed to be everywhere. But the guns of 'E' and 'F' troops still continued to knock out Nazi tanks. It was not until nightfall that the last men of 'E' troop were overwhelmed. But the Germans did not reach Beja. Seven Royal Artillerymen out of 300 returned to the British lines. A special badge was produced for them – showing a sword piercing a Panzer tank.

At Tebourbe, just north of Medjez-el-Bab, 132 (Welsh) Field Regiment was under heavy fire including dive-bombing, but some of its guns attacked the German armour in an olive grove, accounting for fourteen tanks and losing all but one of their own guns. In the south at Medenine in Libya, just below the Mareth Line, a gunner

Special badge awarded to commemorate the Battle of Beja, 1944. White metal and dull red cloth with brooch fastening

battle took place in March 1943. The anti-tank guns here were sited to destroy Rommel's tanks rather than support the New Zealand infantry. Six-pounders were manned by the 65th (Norfolk Yeomanry) and the 73rd Anti-tank regiments, and there were also new seventeen-pounders with the 7th New Zealand Anti-tank Regiment. At least ten field and medium regiments, totalling in all about 500 guns, supported this dawn action against the three attacking Panzer divisions. Anti-aircraft gunners kept the attacking Stukas under control. Soon Rommel realized that his attack was not succeeding, and when counter-attacks were made on his troops he endeavoured to withdraw. The engagement went on throughout the night. By morning fifty-two of his tanks, one-third of his total, had gone – victims of the British artillery. The Mareth Line was broken by 9 May. All Axis resistance in North Africa collapsed and General von Arnim was taken prisoner.

In July the invasion of Sicily took place. History was made when the 1st Air-landing Anti-tank Battery became the first artillery unit to fly into battle as part of the 1st Parachute Brigade. Two thousand landing craft brought the bulk of the Allied forces to the island, and the German garrison withdrew across the Straits of Messina. During the short campaign in Sicily there were continual bombing attacks, but the anti-aircraft gunners were so devastating that the enemy raids soon decreased. The mainland defences were now to be softened up prior to the assault. Once again the anti-aircraft guns kept the enemy out of the sky while the heavy guns broke up the German land concentrations. The 114 guns noted on the mainland were reduced to 50 by the time of the crossing. In all, nearly 30,000 rounds were fired by over 400 guns of all types.

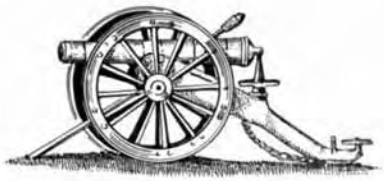
The congested areas of the assault landings at Salerno and Anzio were afforded relief by well-directed artillery fire on the enemy. The push northwards was held up at Cassino, but the determined Poles removed this problem in May 1944.

The D-Day invasion of Normandy in June 1944 was an amazingly detailed operation, the stages of which went like clockwork. Some artillery was now self-propelled in tanks, although other more conventional branches of artillery still had their

functional roles to fulfil. In fact the fighting at Caen and the Falaise Gap brought many types of guns into play for the ultimate victory. Accurate barrages and saturation of enemy-held areas did much to make rapid advances possible through France and the Low Countries. In October 1944 a two-day engagement of the 25th Field Regiment kept back the Tiger tanks from advancing on Asten. On the second day, despite the attacks beginning at seven in the morning, the tanks were brought to a halt by 3.00 p.m. only 300 yards away from the observation post directing the fire which was surrounded on three sides. By this determined effort two Panzer divisions were prevented from breaking through and capturing H.Q. Second Army. Two of the batteries in this action were awarded the honour title of 'Asten'.

The Rhine was not crossed until March of the following year and then the German cities fell one by one. In May the surrender to Field-Marshal Montgomery took place on Lüneburg Heath and the war in Europe was over.

The artillery had fought long campaigns on other fronts, that in the Far East being a most sanguinary affair. But by May 1945 the Japanese forces in Burma had been routed and by the time of the landing in Malaya in September the Japanese had surrendered.



Post-War Years

One might consider that the period from 1945 onwards was one of peace, but in fact there were many conflicts throughout the world where the Royal Artillery was engaged. The troubles between Jew and Arab were not to be solved. Even though Britain announced in 1947 that she was giving up the Mandate in Palestine, many British soldiers were killed in a bomb outrage a few days later. Eventually in Haifa in January 1948 self-propelled guns of the Royal Horse Artillery opened fire and secured peace for some time. Other field guns supported the actions in this area.

In Korea the threat of a third world war arose in 1951. The Commonwealth Division had action many times against the North Koreans. One famous engagement was that at Imjin Hill on 24–25 April when the Gloucestershire Regiment was supported by the mortars of the 17th Light Battery. To commemorate this heroic occasion a special American Presidential Citation was made and all ranks at Imjin were allowed to wear blue ribbon in an embroidered frame. The battery was also given the honour title of 'Imjin'.

In October 1951 the Egyptian revolutionaries began putting pressure on British troops and their families in the Canal Zone. After many murders, actual fighting broke out and the guns of the 26th Field Regiment had to give close support to the Guards Brigade in an action which resulted in easy victory.

Other places like Cyprus, Kenya, Aden, Sarawak and more recently Northern Ireland are among those in which the Royal Artillery has

Militia artillery, c. 1856. Left to right: gunner; officer, full dress; officer, undress. From a contemporary coloured print

1 Sergeant, *c.* Queen Anne
2 Gunner, *c.* William III
3 Gunner, *c.* Charles II

1 **Officer,** *c.* 1745
2 **Gunner,** *c.* 1748
3 **Drummer,** *c.* 1748

MICHAEL ROFFE

1 **Officer, *c.* 1778**
2 **Gunner, 1792**
3 **Gunner, 1793**

1 **Gunner, 1807**
2 **Gunner, *c.* 1815**
3 **Officer, 1793**

MICHAEL ROFFE

1 Trumpeter, 1847
2 Officer, 1854
3 Officer, 1828

1 **Officer, *c.* 1860**
2 **Officer, 1879**
3 **Gunner, 1884**

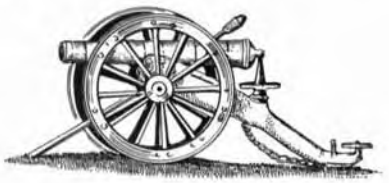
1 Bombardier, Boer War
2 Officer, First World War
3 Officer, full dress, 1928

1 **Bombardier, battledress, 1940**
2 **Sergeant, walking-out dress, 1946**
3 **Officer, No. 2 dress, 1972**

MICHAEL ROFFE

Royal Artillery crossing a river on an improvised raft. By G. B. Campion

been present, even if in an 'infantry' peace-keeping role. But there is no doubt that they will continue to serve in future years in the honourable manner expected from a regiment so steeped in tradition.



Growth and Development of the Royal Artillery

The idea of raising a train of artillery only in the time of need had several defects. First, the available gunners had to be found in ones and twos around the coastal forts and castles throughout Great Britain. These strongholds had static defensive cannon, but the men who served the guns were frequently old and possibly disabled pensioners. Secondly, the actual cannon and mortars had to be gathered together. This might be satisfactory if the train was to move from London, for the Tower was the arsenal, but not so convenient if the train was needed in some distant part. Thirdly, the gunpowder and provisioning, which were highly complex, might be deficient from poor storage and even insufficient in quantity. Fourthly, the actual draught-horses had to be found and hired at the last moment, as also had the drivers, who were civilian and as such did not welcome military discipline.

Thus the establishment of two permanent companies of gunners and matrosses in May 1716 was at least one step forward. New companies were raised over the years; the third and fourth in

1722, the fifth in 1740, the sixth and seventh in 1742, the eighth in 1743, the ninth and tenth in 1744, the eleventh in 1745, the twelfth in 1747, the thirteenth in 1749, the fourteenth to nineteenth in 1755, the twentieth to twenty-third in 1756, and the twenty-fourth to twenty-seventh in 1757. These companies were not numbered at this time; each was known by the name of its captain. They were stationed abroad if necessary and by 1757 some of the earlier companies had been disbanded.

It was decided to organize the remaining twenty-four companies into two battalions in 1757. This would have given twelve companies to each battalion, but the eldest company had its officer promoted to a lieutenant-colonel and the men were dispersed to the other companies. Yet more companies were raised over the years and thus fresh battalions were created. Even with the battalion the various companies could serve in widely dispersed stations.

The 3rd Battalion was raised in December 1759 and the 4th in June 1771. What would have been the 5th Battalion was actually an invalid battalion which was formed in August 1779 with ten companies, two from each of the four battalions and two new companies being raised.

Five companies of the 5th Battalion were raised at Plymouth in October 1794 and the others were raised in the next year. The 6th Battalion was raised at Woolwich in July 1799; the 7th Battalion was formed in April 1801 from the Royal Irish Artillery which had been established in May 1755. These Irish gunners even served in North America, but on the Act of Union in 1801 there was no need for a separate establishment.

The 8th Battalion was formed at Woolwich in September 1803 and the 9th Battalion at the same place in June 1806. The 10th Battalion, which was formed in March 1808, was the first to be disbanded after the end of the Napoleonic Wars. This was in 1817–18 and in the following year two companies from each of the other battalions were disbanded. An entirely new 10th Battalion was raised in April 1846 and in November 1848 the 11th and 12th Battalions were formed. February 1851 saw the 13th Battalion in being and the outbreak of the Crimean War was the reason for a 14th Battalion in April 1855. The companies could still be stationed anywhere in the world. Two companies had been specially raised in April 1791 for service in the East Indies, but there was little reason to continue this practice.

The Board of Ordnance who had administered the artillery and the engineers since early days and had even granted commissions was abolished in May 1855. The Royal Artillery now came directly under the War Office like the rest of the army. This left the way open for sweeping changes. In July 1859 a complete reorganization took place. Battalion and company gave place to brigade and battery. The Horse Brigade, the Royal Horse Artillery which had been raised in 1793 had at that time ten troops which were known by the letters A to K. The same letters applied to the new batteries. The main body of the Royal Artillery was organized as fourteen field and garrison brigades. The field batteries were now numbered from 1 to 48 and the garrison batteries from 1 to 64, being grouped into six and

Gunner's busby with white hair plume in grenade socket-holder, c. 1860

Waist-belt plates
1 Bombay Artillery, c. 1835
2 Royal Artillery, c. 1840. Later worn on undress belt only
3 Edinburgh Militia Artillery, c. 1880, bearing devices of the Duke of Edinburgh
4 Essex Volunteer Artillery, c. 1885. White metal
5 Lancashire Volunteer Artillery, c. 1885. White metal
6 1st Yorkshire Artillery Volunteers (North Riding), c. 1885. White metal

eight brigades respectively. Considerable renumbering and relettering took place later in the century as new groups were made, but these are too complicated to be noted here.

But one addition must be noted. In 1861 the artillery of the three Indian Presidencies, those of the Bengal, Madras and Bombay, was absorbed into the British army. The Royal Horse Artillery was called the 1st Horse Brigade. A 2nd and a 5th Horse Brigade was formed from the Bengal Horse Artillery, the 3rd from the Madras Artillery and the 4th from Bombay. As the Royal Artillery was now grouped in fifteen brigades the new Foot Artillery brigades from India were numbered from 16 to 25.

When the army was given territorial locations in 1881–2 changes took place in the artillery. Infantry militia which dated back to Anglo-Saxon times as the defenders of England had continued as a home defence body. In 1853–4 many militia regiments were converted to artillery and became garrison units operating fixed defences on the coast and in fortified positions. The volunteer movement to defend Great Britain which became strong in 1859–60 brought many artillery volunteers into being. These also served in fixed defence as well as on field pieces. Small corps were encouraged to become part of larger formations. The 1881 changes worked to this end. The garrison batteries were formed into divisions in 1882, and from 1891 they were called companies. In 1899 the regular artillery discontinued the brigade system and field batteries were numbered consecutively.

By the beginning of the Boer War there were 95 field batteries and the Royal Horse Artillery had increased to 21 batteries. The Royal Garrison Artillery now numbered 91 companies and abroad there were 10 mountain batteries. When it came to going abroad to fight in South Africa it was only the regulars who could go. Less than a handful of militia units went on overseas garrison duty and no volunteer unit as such could be included. Thus many had to volunteer for specially raised wartime units. In 1902 the Royal Garrison Artillery divisions were abolished and

A 105 mm. pack howitzer of 7th Parachute Light Regiment, R.H.A. in action. October, 1966. (Crown Copyright)

the companies were numbered consecutively. In 1908 the volunteer or territorial force was re-organized into fighting divisions with artillery in correct supporting roles. The new army was now under fresh terms which permitted the 'Saturday night' soldier to fight abroad.

When the First World War broke out the regular artillery and the volunteers went to France, but the militia artillery settled down to a reserve and replacement role. A special recruiting drive by Kitchener produced his own armies and many artillery regiments which were 'service' or wartime only units.

The re-formation of troops after the First World War saw many artillery regiments disbanded. The Territorial Army was still grouped into fighting divisions, with the addition of new artillery units created from yeomanry corps. The passing of the horse in warfare lessened the need of these ancient cavalry regiments, but they soon adapted to their new role. Batteries were now organized into regiments.

In 1924 the Royal Artillery became a large corps, with the difference between Royal Field Artillery and Royal Garrison Artillery abolished. The tentative mechanization of part of the army in 1934 saw the gradual disapperaance of the horse-drawn artillery. By 1937 a battery of Royal Horse Artillery was mechanized as well as 9th Field Brigade. By 1939 the change was complete except for the single Royal Horse Artillery troop kept for ceremonial purposes. In 1938 when Chamberlain acquired the paper of the 'Munich Agreement' intense efforts were made to duplicate the units of the Territorial Army.

The advent of aircraft in the First World War brought ingenious methods of mounting guns so that they could point in the air and bring down the enemy. By 1927 both regular and territorial artillery had anti-aircraft (A.A.) units. By 1939 aircraft improvements over the last twenty years brought great threats and new equipment was designed to combat the menace. Many new anti-aircraft and searchlight units were formed before war broke out.

Coastal batteries, including very heavy guns on

railway mountings, were still in being but not extensively employed, except on the Straits of Dover. Wartime needs brought forth many new types of artillery like the Bofors of Light A.A., the 3.7-inch of Heavy A.A. and the popular twenty-five-pounders of field batteries. The violence of the Panzerkorps made necessary the extension of anti-tank weapons. The early Boys rifle was soon replaced by the six-pounder anti-tank gun. The bombing of Great Britain saw the creation of an A.A. Command, with three corps of twelve divisions. This command had at one time 2,600 heavy A.A. guns, 1,600 light A.A. guns, 5,500 rocket projectors and 4,000 search-lights.

At the beginning of the Second World War, merchant ships were defended by men wearing the title 'DEMS' which stood for Defensively Equipped Merchant Ships. In March 1940 the War Office with the approval of the Admiralty installed light machine-guns on ships for anti-aircraft purpose. The original 1,000 men with 500 light machine-guns had by March 1941 increased to 3,900 men with machine-guns and 1,700 A.A. gunners with 300 Bofors. In May the whole group was taken over by the Royal Artillery and the Maritime Anti-aircraft Royal Artillery of three regiments was formed covering some 11,200 men. In December the gunners who had defended the ports became the fourth regiment and the title changed to Maritime Royal Artillery. By 1943 there were six regiments and on D-Day the total strength was 14,300 men. The official date of disbandment of the Maritime R.A. was 31 March 1946.

Final adjustments are made to a 'Thunderbird II' surface-to-air missile before firing. (Crown Copyright)

Artillery became airborne in the Second World War. The first unit to fly into battle was the 1st Air-landing Anti-tank (A/L A/Tk) Battery in 1943. Eight guns went from North Africa in gliders to land in Sicily. The 1st A/L Brigade also had a light regiment R.A. as did the 6th A/L Brigade. The 53rd (Worcestershire Yeomanry) A/Tk Regiment became an A/L Light Regiment in 1943 and went into action by glider on D-Day. Since the war the regular artillery has had para-chute artillery in a 'light' role, one of which went to Bahrein. Commando light regiments have appeared in the Royal Artillery, one having service in Brunei.

By 1953 it was realized that conventional pro-jectiles would no longer be effective against the great speed and height of the new aircraft. The disbandment of A.A. regiments began, the A.A. Command being disbanded in August 1955. Coastal artillery also began to disband at the same time. The introduction of guided weapons began in 1957. Guided Weapons regiments were equipped with the 'Corporal', a surface-to-surface weapon. Later the 'Thunderbird', a surface-to-ground weapon was introduced into the air defence regiments. Today the Royal Artillery control the nuclear striking power in the army, a vast responsibility.

Non-commissioned officer, c. 1870. Note distinctive arrangement of campaign medals

GLOSSARY

brass falcons
demi-culverins
sakers
minions
cohorns
} varieties of cannon

matrosses
conductors
} types of artillerymen

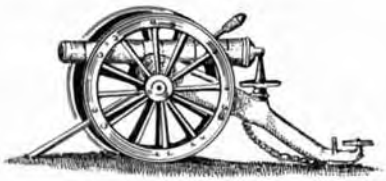
partizan — long-handled halberd carried by sergeants

galloglasses (Irish – *gall-oglach*) was the name given to a class of professional soldier, largely recruited in the Hebrides, who formed part of the retinue of every chief or noble in Ireland in the sixteenth century

carcasses
spherical case
} ammunition

Front and back views of senior non-commissioned officer in full dress, 1865. Contemporary official photograph

Front and back views of a corporal in undress uniform, 1865. Contemporary official photograph



The Plates

A1 Sergeant, c. *Queen Anne*

Patriotic feelings in England led William III to discontinue the wearing of the blue Dutch coat. It was replaced by the well-known red coat worn by the English soldier since the time of Elizabeth I, and worn by the train of artillery up to the reign of Queen Anne. The facings or lining were of Royal blue, at that time lighter than those of today. Breeches and waistcoat were also blue. The loose top garment, which was more of an overcoat, had the buttonholes strengthened with braid or tape. Whereas white tape was used by the infantry regiments the artillery preferred yellow. Officers and senior non-commissioned officers had gold or gold-coloured braid instead of yellow. The sergeant had braid around his armholes and down the sleeves.

The halberd was a staved weapon to indicate the sergeant's rank and also his position in the field. This was the uniform worn at Blenheim and other battles fought under the command of the Duke of Marlborough.

A2 Gunner, c. *William III*

When the Prince of Orange came to England to take over the throne, he brought his own artillerymen. These were dressed in the colours of the Netherlands, the practical dark blue with a lining or facing cloth of an orange colour. Orange blossom was the chosen flower for this Dutch house and one which was adopted later for some English regiments.

The clothing at this time followed the civilian fashion, being loose and sensible for use on the battlefield. When the wide sleeves were turned up and buttoned back, the facing colour showed as did the sleeves of the shirt. Although coats could button from the neck to the bottom of the skirts, it was the practice to leave the top and lower buttons unfastened to give ease of movement.

This gunner has a short piece of wood with the burning match wound around it. Slung from a shoulder-belt he has a powder horn to prime the touch-hole of his cannon. His heavy brass-hilted sword served to defend him if his guns were attacked by the enemy.

A3 Gunner, c. *Charles II*

Before the Royal Regiment of Artillery was created, gunners were stationed at the Tower of London and other fortresses in England with responsibility for the defensive cannon in those places. The illustration is based on a contemporary painting by Godfrey Kneller which shows Antony Payne, who was called 'captain of the guns', in the Citadel at Plymouth. As he was over seven feet tall he was nicknamed 'the Cornish Giant'. He was a veteran of the Royalist cause in the English Civil War and no doubt was given this post as a reward for his loyalty.

This early gunner wears a dull red garment somewhat similar to that worn by the Yeoman of the Guard and the Tower Warders. These Royal servants were provided regularly by the Great Wardrobe of the King with red livery coats guarded or trimmed with black velvet. Payne also appears to have the velvet trimmings as did the Scottish artillerymen of the same reign. The Cornishman holds in his left hand a linstock, an artillery aid and weapon with movable arms by which the interior diameter of a gun-barrel could be measured so that the correct cannon-ball could be chosen. What appears to be a cord attached to the head is the match which burnt slowly and served to ignite the priming gunpowder at the touch-hole of the cannon. The gunner held the linstock at the lower end in order to place himself at the greatest distance away from the touch-hole.

It is to be noticed that Antony Payne had red soles and heels to his shoes, a fashion affected at that time by gentlemen and persons of money.

B1 Officer, c. *1745*

When the Georges of the House of Hanover came to Great Britain, these Germans had practical experience of artillery in war conditions and had found that dark-blue coats stood up better to the gunsmoke and trials of the battlefield. Thus the red coat was discontinued for the gunner although

the Royal colours of blue and red continued in use, but reversed.

The uniform depicted is taken from a rare watercolour once in possession of the Royal Artillery Institution but now destroyed. This showed an officer in the position of attention at that time. The feet were placed apart, his left hand was on his left hip and the right arm fully extended gripping his lightweight fusil, a special firearm carried at that time by officers.

The officer wears a crimson silk sash over his left shoulder to indicate his rank. His lace and buttons were gold and the illustration follows the unusual spacing in the original watercolour. His waistcoat and breeches are scarlet instead of the blue worn by the common gunner or matross. The full skirts of the coat were now turned-back to allow greater freedom of movement of the legs, while the turned-up sleeves had become smaller and more like a normal cuff.

B2 Gunner, c. *1748*

Her Majesty Queen Elizabeth II possesses a large oil painting (now on view in the National Army Museum, Chelsea) by David Morier, which shows the Royal Regiment of Artillery in the Low Countries. The gunner of the illustration is based on one of the figures in this valuable piece of pictorial evidence.

The dark-blue uniform is relieved by the scarlet of the small cuffs, the narrow lapels and the turned-back skirts. The yellow braid on all the buttonholes, around the flaps of the side pocket and the slash on the sleeve makes elaborate patterns sometimes difficult to understand.

Black cloth gaiters were worn by the artillery on service as white gaiters would not have stood up to the mud and work of handling cannon on the battlefield.

In the seventeenth century, fusiliers guarded the train of artillery, but now that the gunners themselves had flintlock muskets they mounted their own guards. The priming horn hung from a long sling. The old Caroline hat which had the brim partly turned up in the reign of William now had the brim stiffened and turned up on three sides to become the tricorn.

Waist-belt clasps
Above: Royal Artillery, full dress, c. 1864; below: Territorial Artillery, full dress, c. 1910. The regular artillery had a similar clasp with 'UBIQUE' engraved on the snake-hook

B3 Drummer, c. *1748*

The large picture by Morier of the artillery in the Low Countries depicted many interesting variations of the artillery dress including drummers and fifers. These musicians follow the fashion of other British drummers and wear coats of 'reversed facings'; in this case red coats with blue facings. The coat is profusely covered with special braid, blue with yellow-and-red decorations. The chevrons on the sleeves are still to be seen today worn by the drummers of the Foot Guards. The braiding on the lapels is both elaborate and unusual.

The cloth 'mitre' cap was worn by grenadiers and fusiliers for it remained on the head more firmly than the three-cornered hat. Infantry colonels used the front part of this cap to carry part of their coat of arms or their crest. In this case the arms of the Board of Ordnance were embroidered thereupon. On the front are three cannon-balls in chief with three cannon on the blue field. Below on the little flap is a mortar in a trophy of small arms.

A curved sabre is the sidearm for musicians, more an indication of a military type rather than a fighting weapon, as normally the blade was not sharpened.

C1 Officer, c. *1778*

By the time of the American Revolution and the Siege of Gibraltar the dress of the artillery had been refined to a military style popular throughout Europe. The small round cuff had been adopted in 1768. The narrow, but long, lapels were ornamental and could not completely button across the body. The hat was cocked into an asymmetrical shape and the cord around the crown was elongated so that one tassel could hang out on the right corner. The black cockade and loop was pushed up high on the left side and the flaps of the hat were firmly fixed into position.

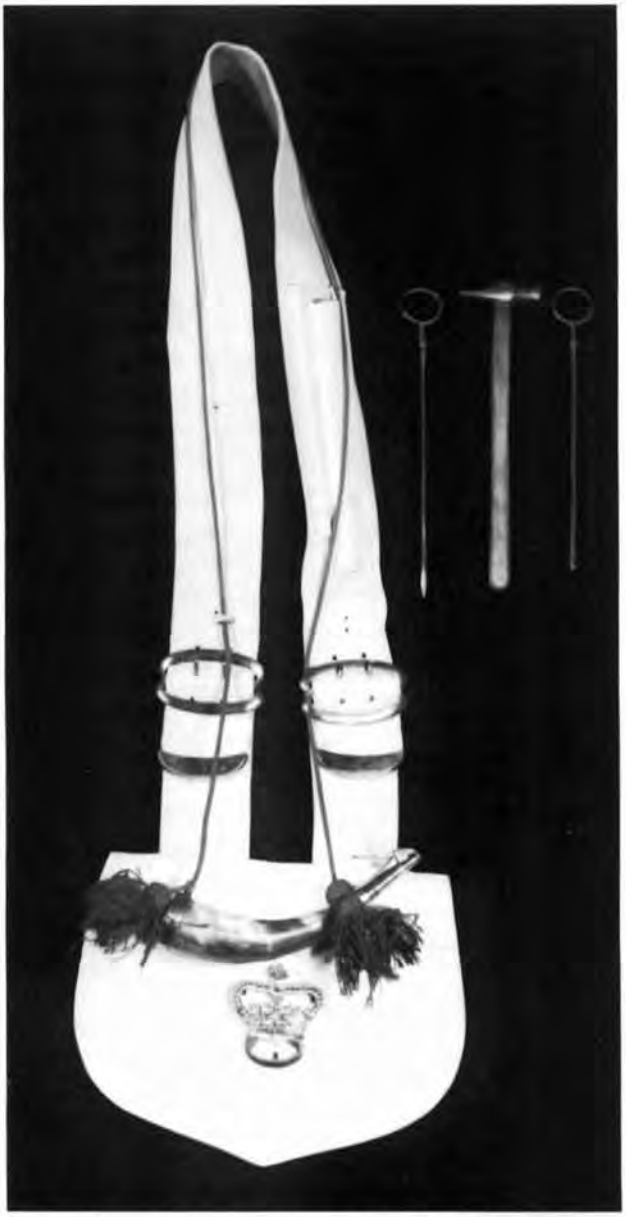
This officer carries a sword to salute with, for the fusil or fusee had been discontinued in 1770. The shoulder-knot which had been used to keep the sash in position had evolved into a fringed shoulder-strap or epaulette. By this date the officer's sash was wound round the waist and the epaulette remained as a token of rank. Gaiters could be worn, but here soft leather boots with flaps at the top were more practical.

C2 Gunner, *1792*

Towards the end of the eighteenth century military dress was very stylish, almost effeminate. This picture based on a watercolour by Edward Dayes catches the spirit of the times. The hat is so cocked that it is almost a bicorn and it now carries a plume, a fashion which gained popularity during the American Revolution.

The coat is close fitting and the sewn-down skirts could never be loosened. The collar is of the 'stand-up' variety and the buttonhole connects with the top hole on the lapel. The pouch-belt has the Royal Crown and a scroll on the flap, which usually bore the battalion number. On top of the pouch may be seen the small powder horn used for priming. On the chest in white leather holders are two priming wires to pierce the cartridge and the brass-headed hammer used to spike the touch-hole of cannon.

The hair at this time was elaborately prepared. It was brushed into a plait at the back and held in place with a strap. After a long and tedious process, grease and powder produced the white appearance. The elaborate ruffle on the chest developed from the shirt frill, and although elegant for a parade was of little use to a fighting man.



Gunner's pouch, c. 1790. The priming horn is suspended on a string; hammer and vent picks can be seen on the right. (National Army Museum)

C3 Gunner, *1793*

The famous artist Philippe Jacques de Loutherbourg made many sketches at Valenciennes in 1793 and included one of this disabled artilleryman. Although lacking his left arm he still provides useful service in bringing liquid refreshment to his mates during the battle. The top hat was a

popular civilian head-dress. Being less cumbersome than the cocked hat it was provided for troops on overseas service. Suitable extras like yellow braid and a red feather in front made it more militant.

Although overalls were not common issue until the next century, these loose trousers were more serviceable on active duties than the tight gaiters and white breeches. The hair was still curled at the sides and brought to a queue at the back tied with ribbon, but mercifully greasing and powdering was being discontinued.

D1 Gunner, 1807

The gunner shown here is based on a contemporary print by J. A. Atkinson. The stovepipe shako had been generally introduced at the turn of the century. The brass plate in front as worn by the artillery had the Royal Cypher in the centre within a Garter. All this was set on a trophy of arms and below was a mortar between pyramids of cannon-balls. The coat was now made with short tails and closed down the front. The yellow braid on the buttonholes had 'bastion' ends. Both long blue pantaloons with short gaiters as well as white breeches with longer gaiters were worn at this period. One shoulder-belt holds the bayonet while the other has the pouch with the powder horn attached by means of a red cord. A large oval buckle was worn at this date, the other ranks' belt-plate not appearing until later. The powdered hair is still worn with a large queue, usually false. A few years later the queue was officially abolished, much to the soldier's pleasure. The large ruffle seen in plate *C2* has now dwindled to a small portion of white at the opening of the collar.

D2 Gunner, c. 1815

About 1812 the stovepipe shako gave way to one with a false front and plaited cords, also known as the 'Belgic cap'. The white plume was now worn on the left side, although in the illustration it is worn with a waterproof cover as is the shako itself. This was a necessary precaution as in wet weather the rain-sodden shako soon went out of shape. The jacket remained in the same style. Overalls were now normally worn on service, and these were white in the Peninsular War but blue-grey at Waterloo and on other occasions. The carrying of a musket was considerably an encumbrance to an artillerymen serving a gun, so this was subsequently discontinued and instead of a bayonet the second belt carried a brass-hilted sword. Artillerymen at Waterloo when overrun by the French cavalry had occasion to defend themselves with these heavy weapons.

D3 Officer, 1793

Loutherbourg also portrayed Sir William Congreve, father of the man who developed the military rocket. Here again is a special dress for overseas service. The light cavalry had developed a leather helmet with a fur crest, sometimes known as the 'Tarleton' helmet. As civilian gentlemen had taken up a version of the felt 'bowler' hat, the head-dress depicted here is a combination of these two. The fur crest gave a superficial likeness to the leather helmet as did the gold cords, but the lightness of the felt hat produced an article easy to wear and yet capable of warding off sword cuts.

The coat has the lapels capable of buttoning, at least for a portion, in the centre of the chest. The two gold epaulettes indicate the rank of an officer. The crimson sash round the waist is now slim and elegant, not the earlier pattern which went round three times. The straight cut-and-thrust sword was suitable for gentlemanly duels but not of much value against firearms. The topped boots were needed for a mounted officer and also for a dismounted one who had to combat the mud of Flanders.

E1 Trumpeter, 1847

The broad-topped shako gave way in 1846 to a straight-sided version called the 'Albert' after the Prince Consort who helped design it. A series of sketches made in Gibraltar by a French officer noted the red coat as worn by drummers and trumpeters of the Royal Artillery. This garment carried blue wings on the shoulders, usually the mark of flank companies but also that of musicians.

The red coat was ordered to be changed to blue in 1849 and gradually disappeared from the artillery.

It will be noted that both bugle and trumpet are carried. As trumpet calls did not carry far in the open country, the bugle was used for signals on the battlefield. The trumpet cords are in red, yellow and blue, the Royal colours. No plume is carried in the shako's holder as the trumpeter is in marching order.

The grenade on the collar was regulation for all ranks, officers as well as men.

E2 Officer, 1854

This officer wears the tight-fitting uniform in which he was expected to fight in the first years of the Crimean War. Sometimes the plume was removed from the shako and frequently in action the ordinary soldier wore the forage cap or a fur cap instead.

The gold wire bullion of the expensive epaulettes was an early casualty of this campaign and they were not often worn. Eventually the coatee itself was discontinued for the cheaper shell-jacket, or in the cold weather the locally purchased fur or skin coats. The blue trousers continued in use, frequently tucked into unauthorized high boots. The Adams pistol was popular on the battlefield as an officer's weapon, for the orthodox sword was too flimsy a weapon to be used for more than a directing instrument. This discontinuance of uniform garments and the use of almost civilian attire led to the introduction of new clothing in 1855.

E3 Officer, 1828

After the defeat of the French at Waterloo new uniforms were found for most of the British army. A new-pattern broad-topped shako had a long cut-feather plume in front. By 1828, the date of the print by E. Hull on which this illustration is based, a large star-plate and gold cords were being worn. The long-tailed coatee had a fringed epaulette on the right shoulder and a plain strap on the left. This was for company officers, but after 1830 two epaulettes were worn. The trousers

Full-dress sabretache and belt. Late Victorian period

were now in a bright shade of blue, but later changed to dark blue to match the coatee.

The oakleaf ornamentation on the collar, cuffs and shirt-flaps was embroidered directly through the cloth with gold wire, a process which needed very competent embroiderers. The ornament at the juncture of the red turned-back linings of the coat-tail was also embroidered, the design showing three cannon inside a laurel wreath with a crown above. The officers' sword was now a slim elegant affair of no practical use.

F1 Officer, c. 1860

The new dress introduced during the Crimean War included a new head-dress. The Royal Horse Artillery had already worn a fur cap or busby for many years. A version of this was now worn by the field batteries. This still had the red bag on the right side, but cords were not worn and a shorter plume was worn on the left side in a gilt or brass grenade-holder. Instead of a metal chin scale a simple strap of black leather was deemed sufficient.

The new-style tunic allowed much freedom of movement and afforded better protection against the weather. Epaulettes were now obsolete and the

Mounted sergeant in khaki drill, c. 1900

badges of rank were worn on each side of the officer's collar. Narrow braid on the shoulders kept the pouch-belt in place. The shoulder-belt for the sword gave way to a waist-belt which enabled the pouch-belt to be worn over the left side. This ornament was of gold lace on leather. The pouch worn in the small of the back had an embroidered flap which included a small gilt gun badge. Rank between senior and junior officers was marked by the cuff embroidery and cord. The juniors had a complicated gold cord knot on each sleeve, while majors and above had a more elaborate pattern of flat gold lace and tracing braid. Wide-cut trousers replaced the older tight pattern.

F2 Officer, 1879

A helmet of Germanic pattern had been experimentally introduced in 1878 and taken into use in the following year. The field artillery pattern was covered with dark-blue cloth and had gilt or brass fittings. The elaborate plate in front incorporated the Royal Arms and the 'gun'. Officers had the peak bound with metal but other ranks did not. A new chinstrap of interlocking metal rings replaced the plain leather strap. The tunic now became a closer-fitting garment. Badges of rank were still worn on the officers' collars, although this changed in 1881 when heavy shoulder-cords were introduced to hold the rank badges. The embroidered crowns and stars were still used but with a different meaning of rank.

The full-dress sabretache had been in use for many years but was discontinued at the turn of the century. It had its origins in the 'pocket' or purse carried by Hungarian hussars whose tight pantaloons would permit no pocket – much the same reason as the sporran in kilted regiments. Once used for carrying orders and writing materials the sabretache was now an ornament, expensively embroidered in the full-dress version. An undress type in plain black leather with a gilt badge was also in use, but even this had little practical use. Binoculars were occasionally carried in a special pouch which fitted on the pouch-belt.

F3 Gunner, 1884

The other ranks of the field and garrison branches of the Royal Artillery had the blue cloth helmet with the spike on top about the same date as the officers. It is said that the spike constituted a danger either to the horse when the driver girthed up or to the eyes of other gun-numbers when limbering or unlimbering the gun. Whatever the reason by 1881 the artillery adopted the ball finial instead. It would be interesting to say that this ball ornament represented a cannon-ball, but the Army Medical Corps also adopted the safer ornament.

The full-dress tunic had nine buttons down the front whereas the service garment had but five buttons. Officially the brass grenade was to be worn on each side of the collar by an order of March 1880. Shoulder-straps also carried designations. Embroidered numbers had been used after the Crimean War but brass was introduced in

1879. With various reorganizations the letters and numbers changed. Field Artillery covered the numbers 1 to 80; the Garrison Artillery had the initial letter of the division, and the Mountain Artillery had an 'M' over the battery number.

G1 Bombardier, Boer War

Khaki service dress had been worn in India for many years and also in Egypt during the campaigns there, but the first major war in which it was the general issue was the Boer War of 1899–1902. Khaki drill was officially issued in 1896 to be worn with the white cloth helmet. Later this helmet was given a removable khaki cover. Brass fittings were at first worn on the white helmet, but later these were removed and a combined button and ventilator was worn on top. Finally, an all-khaki helmet was introduced with a pleated pugri and a leather chinstrap. Badges of metal were not to be worn, but distinctions of cloth were gradually adopted; in the case of the artillery these were in red and blue.

The khaki drill tunic and trousers were of a thin fabric which tended to wrinkle and crease. Brass buttons were still worn but made removable by means of a special fastening of wire. Woven badges of rank like the chevrons in the picture were attached to the sleeve by means of hooks and eyes. Thus all extras could be removed and the garment thoroughly washed, pressed and starched if necessary.

Dark-blue puttees had been worn in India, and although khaki puttees were permitted in 1900 many photographs of the Boer War show the old type still being worn on the veld.

The bombardier at this time had only one chevron. It was not until 1920 that this rank was given two and the single chevron then indicated the lance-bombardier.

G2 Officer, World War I

Service dress or drab clothing was introduced for the army at home and abroad in 1902. The pattern of tunic or jacket changed. At first officers had closed collars, a fashion which lasted until 1913. Cords were worn on the shoulders but changed to shoulder-straps which, during the war and unofficially, carried the officers' badges of rank. Initially the badges of rank were on the sleeves, but in the trenches these were not easily observable and thus the shoulder rank badges became popular.

Another change brought about by war conditions was in the khaki forage cap. Normally a stiff ring of wire kept the top flat. But cruising enemy aircraft looking for troop movements could spot, at a considerable distance, sunlight flashing from these cap tops. Thus it became the practice to remove these wires, giving the cap a floppy appearance. Regimental and other badges were given a bronze finish to render them inconspicuous. Buttons were allowed to become dirty for the same reason. Artificial colouring was sometimes added, but officers usually adopted brown leather buttons which stood up well to trench conditions. Although puttees were considered regulation, high boots as well as leather gaiters were very popular in warding off the mud of Flanders.

Although a Sam Browne belt was worn, the

Full-dress tunic of a lieutenant. Period of Edward VII

Artillery buttons
Left to right, top to bottom: Royal Artillery, c. 1790; Royal Artillery, c. 1815; Royal Artillery, c. 1880; East India Company Foot Artillery, c. 1820; St. Helena Artillery, c. 1830; Royal Horse Artillery, c. 1840; Gold Coast Artillery, c. 1860; East India Company Artillery, c. 1857; 1st Essex Artillery Volunteers, c. 1885; 1st Edinburgh (City) Volunteer Artillery, c. 1895.

sword had little part in that war. A pistol holster was usually attached to the waist-belt. A stout case or stick was the mark of most officers and served many useful purposes.

G3 Officer, full dress, 1928

The First World War dealt a severe blow to the wearing of full dress. It was not to return for the ordinary soldier, but King George V restored it eventually to his household troops. For the remainder of the army there were certain exceptions. After several years the use of full dress by regimental bands was allowed, as they served a useful purpose in recruiting. A more immediate need for full dress was when officers were invited to Royal levees and similar occasions. Those who were in possession of their pre-war uniforms were allowed to wear them. Finally all officers at a levee found full-dress uniforms, even if they were only hired for the occasion. Certain units like the Royal Corps of Signals and the Royal Tank Corps, which had not existed before the war, were allowed to have newly designed full-dress uniforms. Thus in 1928 a new head-dress was introduced to the Royal Artillery. Actually it was an old one, the busby, but it replaced the blue cloth helmet. This new fur cap had black cony skin, the cloth bag was scarlet as expected, and the plume on the left side was of white goat's-hair.

The rest of the uniform was as worn previously, although in places the 'G VI R' cypher might replace that of 'G V R'. The Second World War broke out in 1939 and this time the full-dress uniform disappeared completely from the Royal Artillery, although the King's Troop keep the Royal Horse Artillery uniform alive for ceremonial occasions.

H1 Bombardier, battledress, 1940

Experiments to find the ideal battledress began as far back as 1932, and eventually in 1938 the blouse and trousers with the patch pocket had been approved. Battledress remained in use after the Second World War, although it suffered changes in material, gas-proofing and in utility fashioning. Inside the front opening of the blouse

Royal Artillery – 49 Field Regiment R.A. at Larkhill, Salisbury Plain. A section of Abbot 105 mm self propelled guns of 143 (Tombs Troop) Field Battery, R.A. in 1969.

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were two deep pockets, reputed to have been designed for steel bullet-proof plates but not used as such. The upper left-hand pocket could hold the pay book although it was also worn inside, sometimes on a string. On the trousers there was an 'ever-stitched' pocket on the right thigh which held the field dressing.

Attempts were made for smartness by applying creases in unusual places on the back. The large pocket on the front of the left leg defied efforts for a trouser crease, although results were sometimes achieved by means of a fine seam stitched all the way down. Later, when gaiters were discontinued away from the battle area, the trousers looked almost normal although the flap and button appeared at the ankle. At the end of the war these flaps were daringly removed. It was even permissible for the collar to be worn open, and for other ranks to wear a collar and tie.

The helmet was covered with a strong netting intended to hold twigs and foliage to aid camouflage. The gas-mask on the chest was in an ever-ready position, but thankfully was never used. The white artillery lanyard can be seen on the right shoulder.

H2 Sergeant, walking-out dress, 1946

No. 1 dress officially introduced in May 1947 had a long history of development. The undress blue frock had been well known at the beginning of the century. It made a return in November 1936, being demonstrated for wear at the forthcoming Coronation. After that Royal occasion soldiers in possession of the Coronation blues were allowed to wear them for walking out.

In June 1946 a parade of three officers and 100 men demonstrated the new blue uniform, which was very similar to that worn previously except that berets now replaced the forage cap. On 13 August 1947 the title 'No. 1 dress' was approved for this blue uniform. The blue beret gave place to the coloured forage cap, although the beret continued to be worn in distinctive colours by airborne and commando artillery.

The cloth belt with its eight-sided buckle eventually gave place to a girdle with red, blue and yellow stripes. Gold chevrons and gold-embroidered badges were permitted to be worn as was the grenade collar badge. The piping on the shoulder-straps and the 1¼-inch trouser stripes were of scarlet cloth. The gun badge was worn on the beret and also on the forage cap.

H3 Officer, No. 2 dress, 1972

Although No. 2 dress is considered a service dress worn with a khaki forage cap, the No. 1 dress cap has been worn with this dress since 1961. The dark-blue cap has a scarlet band and piping on the crown. For senior officers the black peak has gold wire on the front edge.

The tunic or jacket is of barathea with metal grenades on the turned-down collar. Buttons, once gilt, are now made of anodized aluminium; they do not need polishing but are not so hardy. The rank badge of a gilt crown for a major and above has a crimson lining.

Shoes worn with service dress are of brown leather, straight-laced, and must not be soled and heeled with rubber.

Drum major and band of the Royal Regiment of Artillery at the Royal Artillery Barracks, Woolwich. July 1970. (Crown Copyright)

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